

WHAT IS CLAIMED IS:

1. An ignition apparatus for an engine having a cylinder head on a combustion chamber thereof comprising:

a plug section including a center electrode and a ground electrode; and

a coil section integrated with the plug section and including a primary coil and a secondary coil to supply a high voltage to the plug section,

wherein the plug section and the coil section have inner connection members contacting each other in a resiliently deformed condition to make electrical connection between the center electrode of the plug section and the secondary coil of the coil section.

2. An ignition apparatus according to claim 1, wherein the connection members include a coil spring.

3. An ignition apparatus according to claim 1, wherein the connection members include a blade spring.

4. An ignition apparatus according to claim 1, wherein the connection members include a spring made of a bent wire.

5. An ignition apparatus according to claim 1, wherein the inner connection members include a resilient spring and a stem, which are separately engaged with each other.

6. An ignition apparatus according to claim 1, further comprising:

a hollow plug case including the plug section and having a first flange; and

a hollow coil case including the coil section and having a second flange,

wherein the first flange and the second flange are engaged with each other and welded to fix the plug case and the coil case.

7. An ignition apparatus according to claim 1, further comprising:

a lid made of nonconductive resin and disposed between the plug section and the coil section.

8. An ignition apparatus according to claim 2, wherein the connection members include a columned connection member having a trench in a peripheral surface thereof for engagement with the coil spring.

9. An ignition apparatus according to claim 2, wherein the connection members include a columned connection member having a conical end surface to receive an end of the coil spring.

10. An ignition apparatus for an engine having a cylinder head on a combustion chamber thereof comprising:

a plug section including a center electrode and a ground electrode and a first connection member;

a coil section integrated with the plug section and including a primary coil, a secondary coil and a second connection member connected with the secondary coil to supply a high voltage to the plug section; and

a hollow coil case accommodating the coil section and having a bolt screwed in an opening at a location opposite the second connection member,

wherein the first connection member and the second connection member are connected each other to make electrical connection between the center electrode of the plug section and the secondary coil of the coil section, and

wherein the bolt presses the second connection member to the first connection member via the coil section.